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AUTHOR Perl, Harold I.
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ABSTRACT

The examination of the functioning of social networks has been used to understand how individual and environmental characteristics can mediate the availability of social support. To examine the relationship between personal attributes, psychosocial environmental attributes, and the interaction between these variables, 92 entering college freshmen completed scales measuring social adaptation response patterns, perceptions of social environment and structures of social networks. Both personological and environmental variables tended to predict various, though different, social network variables. Social exploration preference was a useful construct in the examination of social network and adaptation variables. The findings suggest that the formation, structuring, and functioning of social networks need further examination with a more uniform methodology. (Author/JAC)

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SOCIAL NETWORK FORMATION OF ENTERING COLLEGE FRESHMEN

Harold I. Perl
University of Maryland

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INTRODUCTION

Recently, researchers with an ecological perspective have begun to take a close look at the interactions between personal and environmental factors and their impact on behavior and psychosocial development (e.g., Kelly, 1979; Moos, 1979a, 1979b; Nielsen & Moos, 1978). Concepts and methods that assess such interactions are essential to a viable community psychology (Kelly, 1970, 1971, 1979; Spielberger & Iscoe, 1972). As Kelly (1979) states: "the issue of the relationship between person and environment...is also becoming increasingly critical for the community psychologist, whose work involves creating therapeutic solutions within diverse social systems" (p. 12).

One trend has been to examine the efficacy of social systems in aiding people to counter the potentially deleterious effects of stress in their lives (Caplan, 1974; Killilea, 1976; Mechanic, 1974; Dean & Lin, 1977; Hirsch, 1979, 1980; Sandler, 1980). However, analysis of these social support systems, though important to the goals of community psychology, have received relatively little attention in concrete terms (Cowen, 1980; Hirsch, 1979; Mitchell & Trickett, 1980). The examination of the functioning of social networks, which has been useful in the theory and research of the disciplines (e.g., Mitchell, 1969), has been described lately as a useful method for understanding how individual and environmental characteristics can mediate the availability of social support (Hirsch, 1979; Mitchell & Trickett, 1980).

Further, while many of the stressful situations studied by social scientists in the past have revolved around major disasters such as death, serious illness, loss or change of job, etc., it is important as well to look at the more widely experienced transitions to which people commonly adjust and adapt (Moos, 1979a; White, 1974).

One such life change is the start of college and living in a dormitory. Although psychology and the other social sciences have reaped a bountiful harvest from the fecund soil of college student subjects, relatively few researchers have looked beyond merely the convenient availability of these populations to the actual experiences involved in going to college.

For many new students this is the first time living away from home, parents, and friends, and the stresses inherent in this transition are added onto the rigors of collegiate academic demands. In all likelihood, new students may find that their relations with their previously established social networks and support systems have been drastically altered, if not severed completely. This may necessitate the development of totally new networks of friends and supports on a heretofore unprecedented scale.

In addition, other developmental issues are coupled with these adaptational demands. College life, especially the first several years, is generally thought to be a time when students, both because of their age and the new setting in which they are placed, begin to examine and experiment with various new ideas, beliefs, and roles, as well as consider broader career aspirations.

The start of college, therefore, can be a time of massive, personal upheaval, which may have to be faced without the benefit and assistance of the support upon which the student has previously relied. The manner in which the new students identify, develop and establish new social networks and support mechanisms while they are in the midst of formulating new roles and relationships within these networks can be useful tools in the understanding of the students' adaptations to this major life change.

The present study is an examination of some of the correlates of the formation, structure and functioning of the social networks of a group of incoming freshmen assigned to live in two high-rise dormitories at the University of Maryland, College Park. Specifically, it focuses on whether and to what extent various personal attributes, psychosocial environmental attributes, and the interactions between these variables relate to the formation and utilization of these networks.

Variables

The independent variable on the personal level is an adaptive social role variable suggested by Edwards (1979), an individual's preference for exploratory behaviors in a new social environment. Participation in any social setting demands some sort of adaptive response from individuals and they respond along an "active-passive" continuum to these demands, reflecting various explorative preferences.

The independent variable on the environmental level is the social climate of the dormitory living unit, the floor. Social settings, notably student living groups, can influence personal

stability and change in many areas, including interpersonal relationships and social competence, and information describing these settings may very well help people select and adapt to the environment in which they function (Moos, 1979a, b).

The major dependent variable is the formation and utilization of social networks. Structural concepts of social networks include size, density (the degree to which network members have relationships with each other independent of the subject), multidimensionality (the extent to which individual dyads engage in different types of behaviors or activities), and reciprocity (the extent to which behaviors between dyads flow in both directions or just one way) of relationships. Satisfaction with social network was also examined.

Hypotheses

Holahan and Wilcox (1978) found that more highly socially competent students had fewer friends in those megadorms whose climates were more dissatisfying. Consequently, the present study hypothesized that high social explorers who were more satisfied with their environment would have more of their social network on their living unit than those who were less satisfied with their environments.

Edwards (1979) has suggested that a more passive adaptive role towards environmental demands reflects a poorer person-environment fit and less personal growth in varying climates. Hirsch (1980) has found that lower density support systems and multidimensional friendships are significantly associated with

better support, mental health and satisfaction. Assuming that better person-environment fit and more personal growth could be operationalized as better support, mental health and satisfaction, it was then hypothesized that the more adaptive behaviors of high exploration preference would be related in some way to less dense networks and especially to more multidimensional relationships. It also seemed reasonable to predict that high social explorers would be more satisfied with their social network and low explorers less satisfied with theirs. Additionally, satisfaction with social network should be related to satisfaction with the social climate of the hall, unless there were a low percentage of network members living in the hall.

METHOD

Measures

The personal variable of social exploration preference was determined by scores on the Edwards Social Exploration scale (1971), to assess attitudes and behaviors in adapting to a social environment.

The environmental variable of social climate of each of the dormitory floors or hallways is measured by the University Residence Environment Scale (URES) developed by Moos and Gerst (1974) which assesses students' perceptions of ten subscales over three general dimensions of the environment: relationship, personal growth, and system maintenance/system change. Relationship dimensions assess the extent to which people are involved in the environment, the degree of support for one another, and

the extent of free and open expression among them. Personal growth dimensions assess the basic directions along which personal development and self-enhancement tend to occur. These include subscales such as the emphasis placed on Independence, Competition, and Intellectuality. System maintenance/system change dimensions deal with the extent to which an environment is orderly, clear in its expectations, maintains control, and is responsive to change (Moos, 1974; 1979a, b).

The dependent variables of social network formation and other lifestyle information were assessed through a self-report measure developed by the investigator and based in part on instruments used in other research (e.g. Hirsch, 1979, 1980; Mitchell, 1980).* The measure assessed various structures (size, density, reciprocity, multidimensionality) and functions (companionship, emotional support, material assistance, advice/information) of the subjects' social networks, as well as other variables describing lifestyle and adaptation patterns.

Procedure

The upper five floors of each of two high-rise co-ed college dorms were selected as the target area. Initial contact with the subject sample was made during the first day of a freshman orientation immediately preceding the start of classes, and the Social Exploration Preference Scale administered. Twelve weeks later,

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*The author would like to thank Barton Hirsch in particular for the instruments which were adapted for this study.

the URES and social network measure were administered to the sample of freshmen.*

Subjects

Subjects who participated in both data collections were 92 white incoming freshmen: 58 women (mean age = 17.69) and 34 men (mean age = 17.71).**

Subjects who completed the URES (including the primary sample of 92 freshmen) were 216 females and 177 males, with mean age of 18.98. Other demographic information is found in Table 1.

Table 1 about here

RESULTS

The Social Exploration Scale and the URES are both true-false questionnaires, with the items counter-balanced for directionality and were scored in accordance with the traditional scoring procedures for each measure. (On each of the measures, higher scores represent a greater presence of that construct which is being measured.)

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*The URES was also administered to other residents of the hall at this time so as to achieve at least a 50% resident participation rate. Previous research has shown a 50% participation rate to adequately approximate total participation (Moos, 1974).

**Since approximately only half of the potential sample of freshmen were available at the original orientation meeting, questions of sample representativeness arose. Ten men and eight women were randomly sampled from those freshmen not attending the meeting and no significant differences in exploration preference or age were found.

URES mean subscale scores (by hall) were converted into standard scores based on normative data and tables supplied by Moos and Gerst (1974). The profiles for Denton (N = 5) and Easton (N = 5) were plotted onto the graph shown in Figure 1.

Figure 1 about here

As can be seen, the two buildings were generally very close together on the subscales. The two major exceptions are the subscales of academic achievement and intellectuality, on which the Denton halls scored 6/10 of a standard deviation higher than the Easton halls. This would seem to indicate the lack of a "between buildings" sample difference.

The normative data supplied by Moos and Gerst (1974) is based on 168 living groups, including co-ed dorms, men's dorms, women's dorms, and fraternities. The subscale means are represented by the dotted line at the standard score of 50 mark. The sample from the present study is similar to the normative group on the subscales of involvement, emotional support, order and organization, student influence, and innovation. Interestingly, these five subscales comprise the Relationship and the System Maintenance/System Change dimensions. The present sample is relatively different from the norm group on the remaining subscales, which comprise the Personal Growth dimension. The present sample scored below the means on the independence, academic achievement, and intellectuality subscales, and above the mean on the traditional social orientation and competition subscales.

Also shown in Figure 1 is the standard score profile of a sample of co-ed dorms (N = 51) supplied by Moos (1979a). The graph indicates that the present sample was relatively close (within 1/2 standard deviation) to the co-ed norm group on the subscales of involvement and emotional support (Relationship dimension); order and organization, student influence, and innovation (System Maintenance/System Change dimension); and academic achievement. The present sample scored relatively lower than the co-ed norm group on independence and intellectuality, and relatively higher on traditional social orientation and competition.

The social network scale yielded two general types of information: data concerning the structure and formation of the social network and data concerning the reported lifestyle and adaptation of the respondent.

Social network variables. The social network variables observed included size (up to a limit of 20 network members), density, percentage of network members that live on the subject's hall, multidimensionality, reciprocity, and satisfaction with social network (based upon the average satisfaction with each dyad).

Additionally, the size, multidimensionality, reciprocity, and satisfaction variables were also calculated for the network members that live on the subject's hall, and are subsequently called the hall-based network variables.

Lifestyle and adaptation variables. The social network scale also elicited information on 21 major lifestyle and adaptation variables. These were factor analysed using a principal components analysis with a varimax rotation, which isolated seven factors. The first four, accounting for nearly 34% of the variance, were chosen for the analyses because of theoretical reasons, and are shown in Table 2. Two additional individual variables that did

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Table 2 about here
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not load highly on any of the four factors were also used in the final analyses because of their conceptual importance. These were membership in a club or organized group and the number of support resources subjects said that they would utilize in case of a problem.

Deriving "Exploration Climate"

Since the present study attempted to examine the interaction between social exploration preference and social climate, it made sense to look at a smaller cluster of URES subscales which most directly describe those exploratory aspects of the environment.

Nielsen and Moos (1978) identify a cluster of subscales from the Classroom Environment Scale (CES) developed by Trickett and Moos (1973) which "articulate conceptually" with the Social Exploration scale. This Exploration Climate index purports to identify those climates which either foster social exploration (high exploration climate) or inhibit it (low exploration climate). The CES, although developed independently, closely parallels the URES, using similar subscales and isolating the same three general

dimensions of the environment. It was thought, therefore that a parallel cluster of URES subscales could be isolated that would successfully discriminate between the exploration climates of various environments.

The scores on the URES subscales were factor analysed (across individuals) using a principal components analysis with varimax rotation in order to isolate that cluster of subscales. Three separate factors were isolated, one of them with the subscales of Involvement, Emotional Support, and Innovation all loading very highly. This factor, accounting for 18.8% of the variances was chosen for theoretical consideration and was used to form an exploratory climate variable. The estimated reliability of the three variables in this factor was .69. Table 3 shows the range of exploratory climate scores across target halls.

Table 3 about here

Testing the Hypotheses

To test the hypotheses, eight multiple regression analyses using a combination of hierarchical and stepwise progressions were performed.

Two different combinations of predictor variables were used. Two regressive equations entering sex (hierarchically),* explorative preference and satisfaction with hall quality (stepwise)

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*Because of the generally high correlations between sex and various of the criterion and predictor variables, as well as the inherent temporal primacy of gender, sex was entered hierarchically as the first predictor in all eight regression equations to reduce its potential as a confound. In addition, multicollinearity of the other predictors did not appear to be a problem in the equations used. Table 4 shows the correlation matrix for the predictor variables.

and the multiplicative interaction between preference and hall quality (hierarchically) were analysed for their ability to predict the criterion variables of percentage of network members living on the hall and absolute number of network members on the hall, respectively. Six regression equations entering sex (hierarchically), exploration preference and exploratory climate (stepwise), and the multiplicative interaction between preference and climate (hierarchically) were examined for their ability to predict the criterion variables of percent of network members living on the hall, absolute number of network members living on the hall, multidimensionality of relationships of hall-based network, reciprocity of relationships of hall-based network, satisfaction with the hall-based network, and satisfaction with the quality of life on the hall,* respectively.

The first set of regression equations was used to test the hypothesis that high social explorers who are more satisfied with their environment would have more of their social network on their living unit than those who are less satisfied with their environment. A regression equation with sex, satisfaction with hall quality, and exploration preference predicted the absolute number of social network members on the hall at a level of $p \leq .05$, accounting for 9% of the variance. Examination of the three individual predictor variables shows that satisfaction with hall quality contributes significantly to the equation ($F = 7.91$, $df = 1,88$, $p \leq .01$) after the effects of sex have been considered.

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*Note that the hall quality satisfaction variable is a predictor in the first set of regressions and a criterion in the second set.

Exploration preference did not add significantly after the effects of sex and hall quality were considered, although the prediction equation remained significant. A summary appears in Table 5.

Table 5 about here

In the second set of equations, the regression equation entering sex, exploratory climate, exploration preference, and preference x climate interacting to predict multidimensionality of hall-based network was significant at $p \leq .01$ ($F = 5.65$, $df = 4,87$) and accounted for 21% of the variance. Examination of the individual predictors revealed that sex, entered first, accounted for 18% of the variance ($F = 19.67$, $df = 1,87$, $p \leq .01$). None of the other variables added significantly to the equation, although their addition did not make the overall prediction equation non-significant. Sex was a very powerful predictor of multidimensionality, although by being entered first it is difficult to partial out the effects of its correlation with the other predictions, especially exploration preference.

A regression equation entering sex, exploration preference, exploratory climate, and preference x climate interaction predicted reciprocity of hall-based network at a level of $p \leq .05$ ($F = 2.52$, $df = 4,87$), and accounted for 10% of the variance. Individual examination of the predictors showed that sex approached significance as a predictor when entered first ($F = 2.85$, $df = 1,67$, $p \leq .10$) and exploration preference approached significance as a predictor ($F = 3.71$, $df = 1,87$, $p \leq .10$) after

the effects of sex were taken into account. The remaining predictors did not reach individual significance, although the overall equation remained significant. Summaries of the above two equations are given in Table 6.

Table 6 about here

It was predicted that high social explorers would be more satisfied with their social networks than low social explorers would be with theirs. However, no significant pearson r correlations were observed between exploration preference and satisfaction with network.

Additionally, satisfaction with social network was hypothesized to be highly related to satisfaction with social climate. In fact, a significant correlation was observed between overall network satisfaction and the hall quality satisfaction factor ($r = .24$, $n = 91$, $p = .01$).

It was hypothesized that high social exploration preference would be significantly correlated with lower density networks and more multidimensional relationships. Actually high exploration preference was seen to be related to more dense networks, contrary to the hypothesis ($r = .26$, $n = 91$, $p = .007$). High exploration preference was also found to correlate significantly with multidimensionality in that portion of the social network that lives on the subject's hall ($r = .18$, $p = .04$) and to tend towards significance with multidimensionality of the overall network ($r = .16$, $n = 92$, $p = .06$).

Correlates of Social Exploration Preference

Social exploration preference was observed to correlate with several of the social network and lifestyle variables. Higher explorers appear to have denser networks ($r = .26$, $n = 91$, $p = .007$) and more reciprocal relationships in both their hall-based networks ($r = .23$, $n = 92$, $p = .02$) and their overall networks ($r = .29$, $n = 92$, $p = .003$). Higher explorers also appear to have more multidimensional relationships in their hall-based networks ($r = .18$, $n = 92$, $p = .04$) and in their overall networks ($r = .16$, $n = 92$, $p = .06$).

Higher explorers had a greater awareness of campus activities ($r = .22$, $n = 92$, $p = .02$) and were more likely to belong to a club or organized activity ($r = .27$, $n = 92$, $p = .005$) than lower explorers. Also, higher explorers reported being willing to utilize a greater number of campus support resources ($r = .23$, $n = 92$, $p = .01$) as well as a trend for being more satisfied with their hall's quality of life ($r = .16$, $n = 92$, $p = .07$) than the lower explorers.

In addition, higher social explorers appeared to perceive the social climates of their halls to be more intellectual ($r = .41$, $p = .000$), more emotionally supportive ($r = .33$, $p = .001$), more innovative ($r = .24$, $p = .01$), and more involved ($r = .17$, $p = .05$) than lower explorers.

Correlates of Social Network and Lifestyle Variables

The Pearson r correlations among the social network and lifestyle variables were examined to assess their usefulness as tools

to understand network phenomena and adaptation patterns. The matrix of these correlations appears in Table 7.

Table 7 about here

Respondents with more reciprocal relationships were likely to have denser networks ($r = .29$, $n = .91$, $p = .002$) with more multidimensional relationships ($r = .27$, $n = 92$, $p = .004$), as well as greater reported satisfaction with hall quality of life ($r = .26$, $n = 92$, $p = .000$).

Those respondents who reported higher satisfaction with their social network were more likely to have a denser network ($r = .36$, $n = 90$, $p = .000$), more reciprocal relationships ($r = .32$, $n = 91$, $p = .001$), and more multidimensional interactions ($r = .25$, $n = 91$, $p = .008$). Those with higher network satisfaction also were more likely to be more satisfied with the ahll quality of life ($r = .24$, $n = 91$, $p = .01$) and less likely to report that they would utilize a high number of campus support resources if they had a problem ($r = -.17$, $n = 91$, $p = .05$).

In addition, respondents with greater satisfaction with hall life tended to have larger networks ($r = .23$, $n = 92$, $p = .01$) with a higher percentage of network members living on the hall ($r = .25$, $n = 92$, $p = .008$), and were more aware of campus activities and resources ($r = .22$, $n = 92$, $p = .02$).

Other interesting observations were that respondents belonging to a club or organized activity were more likely to report that they would use a greater number of campus support resources in case of a problem ($r = .26$, $n = 92$, $p = .007$).

Additionally, these club members had less dense networks ($r = -.19$, $n = 91$, $p = .04$).

Gender Differences

Separate correlation matrices were generated for male-only and female-only subsamples, because of the many associations between sex and the other variables examined.

The male and female subgroups often had differing correlations between the various social network and life-style variables. Therefore, each of the twenty-four correlations of those variables (including social exploration preference) that were significant for the total group were tested for magnitude of the difference between males and females using the procedure given by McNemar (1962, p. 140). A significant difference in magnitude was found in seven of the correlations.

Female higher explorers were more likely to belong to a club or organized activity ($p = .007$) and reported that they would utilize a greater number of campus support resources than male higher explorers ($p = .03$). Male higher explorers were more likely to have a denser social network than females ($p = .05$).

Females also showed a greater correlation between awareness of campus activities and percentage of network members living on the hall ($p = .02$) than males, while males showed a greater correlation between size of network and satisfaction with the hall ($p < .001$) than females.

Females had higher exploration preferences ($t = 2.05$, $df = 74$, $p = .04$), larger network sizes ($t = 1.75$, $df = 69$,

p = .09), and more multidimensional relationships, both in their hall-based (t = 4.33, df = 65, p = .000) and in their overall networks (t = 2.62, df = 71, p = .01) than males. Females perceived their hall climates to be more innovative (t = 2.31, df = 58, p = .02) and showed a trend towards perceiving their halls to be more emotionally supportive (t = 1.71, df = 75, p = .09) than males.

Social exploration preference apparently had several different manifestations for males and females. Female high explorers had more reciprocal relationships in their overall networks (t = 2.46, df = 47, p = .02) and reported that they would use more campus support resources in case of problems (t = 1.79, df = 56, p = .08) than female low explorers. There was no such difference for the males. However, male high explorers were significantly more aware of campus activities (t = 2.12, df = 31, p = .04) than were male low explorers, while females did not report any differences.

DISCUSSION

Social Network Prediction

Three regression equations were developed that predicted social network variables at a statistically significant level. The predictive abilities of the individual variables varied with each criterion variable. Apparently, satisfaction with hall quality was the major individual predictor of number of network members living on the hall, sex was the major predictor of multidimensionality of hall-based network, and sex and exploration

preference approached significant prediction (individually) of reciprocity of hall-based network. The ability of the overall equations to predict these social network variables is heartening, although the relative absence of significant individual predictors leaves the picture somewhat muddled. There seems to be a great degree of redundancy among the predictors and further methodological refinements are needed in order to discern the individual contributions more adequately. However, it is clear that multidimensionality and reciprocity are both useful structural concepts of social networks, and they can be important theoretically and empirically.

Social Network Satisfaction and Density

Previous research in social networks (notably Hirsch, 1979, 1980) has associated greater social network satisfaction with lower density of networks. However, the present study observed significant positive correlations between network satisfaction and higher density networks. There are several plausible reasons for this apparent discrepancy, including the differences in subjects, settings, and instrumentation. Hirsch (1980) used widows and mature women returning to college for his populations, while the present study used entering college freshmen in the 17 to 19 age range. Hirsch's study examined the functioning of an existing social network in providing support during a major life transition, while the current project looked at the formation of a new social network made necessary by a major life transition, in the context of dormitory living. Also, Hirsch used satisfaction information

for each of five different network functions, while the present study used a global satisfaction scale across four network functions.

However, the setting may be the most salient difference. The subjects of Hirsch's study are reorganizing their lives and developing "reinforcing social roles and activities appropriate to current life circumstances" (1980, p. 170). They are not forming completely new networks, but rather seeking to adapt their interactions with the old ones to gain support for their new roles. Hirsch suggests that the "segregation of different spheres of activity characterizing low density, multidimensional [networks]" may protect people from the debilitating effects of problematic changes in their lives (p. 170). However, the college freshmen in the present study are in the process of forming almost totally new networks, a process which presumably entails a large portion of time sharing experiences and building mutual trust and affection. Since this is occurring largely in the setting of a college dormitory (where network density is generally high), and during a period of rigorous academic demands (which may make leisure hours relatively scarce), it seems reasonable to suggest that those networks which are cultivated through the shared experiences of groups larger than dyads may be more satisfying simply because of their efficiency than those networks which need to be cultivated by the more time-consuming process of exclusively dyadic interactions. Also, the cohesiveness that can be a major component of a high density network may be essential for satisfaction with a network during its nascent, formative stages.

The present study did find that network satisfaction was significantly associated with more multidimensional relationships (as did Hirsch, 1979, 1980) and more reciprocal interactions. The college experience, especially the first few years, is popularly thought to be a time when students begin to examine and experiment with various new ideas, beliefs, and roles. It is not surprising that a sample of college freshmen would report the highest satisfaction with those networks that provide and encourage the greatest breadth of roles and functions (i.e., multidimensionality) as well as the highest degree of personal flexibility and willingness to experience more than a unidirectional relationship (i.e., reciprocity). Indeed, the students may even seek out those relationships that will allow them this added personal breadth. This observation also suggests the satisfaction inherent in giving, as well as receiving, interpersonal support.

Another interesting observation was the positive relationship between network satisfaction and the prediction of utilization of a lesser number of campus support resources. This may be explained by noting that people who are more satisfied with the functioning of their own naturally occurring support system will probably see less personal need for the more formalized campus support resources.

Social Exploration Preference

Several significant differences were observed between higher and lower explorers both in the lifestyle and adaption variables and the social network structure and formation variables. Higher explorers were more aware of campus activities and resources,

were more likely to belong to a club or organized activity, reported that they would utilize a greater number of campus support resources, and reported greater satisfaction with their hall than lower explorers. Higher explorers also formed significantly higher density, more reciprocal, and more multidimensional networks than lower explorers, regardless of the climate of the hall on which they lived.

Higher explorers perceived their current environment to be more emotionally supportive, more intellectual, and more innovative, than did lower explorers.

The above observations apparently lend much support to the contentions of Kelly and his colleagues (e.g., Kelly, 1979; Edwards, 1971, 1979) that social exploration preference can be useful in the examination of peoples' interactions with their environment. Previously, its use as a research vehicle has been primarily in high school settings (Kelly, 1979; Nielsen & Moos, 1978), but the current study shows it to be potentially valuable in other settings, as well.

Gender Differences

As reported above, males and females appeared to differ significantly across several dimensions of network formation and adaptation pattern. Not only were females observed to be significantly higher explorers than males, but that higher exploration also meant something different for females than it did for males. Female higher explorers were more likely to have more reciprocal relationships and to report that they would utilize more campus

support resources in case of problems than female lower explorers. The male group showed no such differences. Although these results are sketchy, they may suggest that adaptive behavior patterns for females might include a greater concern with personal support and relationship dimensions. However, extensive further examination is clearly mandated to determine whether these observations are true population characteristics or merely sample fluctuations.

For example are females in general more exploratory than males? If not, then where are the high explorer males? Do they live off-campus instead of in dormitories? These are questions to be answered by further studies that go beyond a dormitory setting.

Implications for Further Study

This project points out the need for continued investigation along several lines of inquiry. First, the formation, structuring, and functioning of social networks all need to be examined much more closely with a more uniform methodology. Mitchell and Trickett (1980), in their recent review of social network research, have commented on the wide range of instrumentation used to examine social networks as well as the varying definitions of network structure and functions. Although the present study both replicated and failed to replicate the findings of previous research (e.g. Hirsch, 1980), the differences in the methodologies of the two studies make it difficult for simple comparisons. Common terminology, measures, and methodology would allow for simpler cross comparisons of various studies of various populations under various

conditions in various settings. This is important because of the implicit assumption of ecological psychology that persons interact with their environments in some significant fashion. Consistent methodologies are necessary if we are to understand and map these various interactional styles and effects.

Attention must also be paid to the developmental aspects of social networks. These networks are not rigid, static, unchanging entities; rather they are as fluid, flexible, and dynamic as the people they connect. For example, discussion of the results of the present study in conjunction with earlier findings (Hirsch, 1980) suggests that the density of a network will relate in different ways to satisfaction depending upon whether the network is more mature and established or young and developing. It is reasonable to assume that other network forms and functions will vary along time and more longitudinal investigations are needed to document this.

Next, the construct of social exploration preference needs to be examined in various settings. The present study has suggested that the social climate of an environment may have a significantly different impact upon people with different adaptive styles. It was observed, for example, that exploratory climate of a hall affected the reciprocity of network relationships differently for high and low explorers. If other outcome variables can be observed to be similarly affected, then we will be father along in our understanding of the impact of settings upon the adaptiveness of various response styles.

Reliable and valid methodologies and instruments are also necessary for the assessment and understanding of the psychosocial and physical climates of various settings, as well as the continued measurement over time. Just as people and social networks are dynamic and developing, so too are settings. It is important to know more than merely that one environment is different from another. Community psychologists must be able to specify what those differences are, along what dimensions they fall, and what interventions (if necessary) will have a significant impact upon them, in order to effectively understand the qualities of different communities.

For example, the present study examined students' responses in an university setting. The results observed need to be utilized in such a manner that they can be useful in aiding people in adjusting to such a setting. Other factors that are germane to an academic setting should be examined in a like manner, and shared with administrators, teachers, residence staff, and residents.

Finally, the present study has suggested that females and males adapt to and interact with their environment in different ways, including social exploration preference, reciprocity of network relationships, and the use of formal campus support resources. These differences can be more clearly understood, and differences on various other outcome variables pinpointed, with further focused research. The results of such research may help us to understand how and why the processes of socialization and adaptation seem to have different impacts upon females and males.

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Table 1

Demographic Breakdown of URES-R Respondents

HALL	(n)
Denton 4	42
Denton 5	40
Denton 6	43
Denton 7	39
Denton 8	45
Easton 4	38
Easton 5	38
Easton 6	36
Easton 7	41
Easton 8	33
N = 395	

SEX	(n)
Female	216
Male	177
(missing	2)
N = 395	

RACE	(n)
White	346
Black	38
Other	4
(missing	7)
N = 395	

AGE	(n)
17	24
18	158
19	99
20	51
21	42
22	13
23	1
24	2
29	1
(missing	4)
N = 395	
$\bar{x}$ = 18.98	

SEMESTERS IN DORM	(n)
1	212
2	26
3	70
4	26
5	21
6	15
7	10
8	9
(missing	6)
N = 395	
$\bar{x}$ = 2.35	

CLASS STANDING	(n)
Freshman	173
Sophomore	103
Junior	58
Senior	46
(missing	15)
N = 395	

Table 2

Items and Loadings for the Derived Lifestyle Factors

FACTHALL: Quality of Life on subject's hall (11.9% variance accounted for)

1. How satisfied are you with the "Quality of Life" in your hall? (5 point Likert-type scale) Factor loading coefficient: .72

2. How close is your hall to what you had hoped it would be like? (5 point Likert-type scale) Factor loading coefficient: .76

FACTOLD: Old social network information (11.2% variance accounted for)

1. When you were in high school last year, how many people (approximately) were in your social network? (Please use the same criteria as above) Factor loading coefficient: .86

2. With how many of these people do you still have regular contact? (Please do not include any of those who may be in your new social network at college) Factor loading coefficient: .92

FACTHOME: Home visit information (11.1% variance accounted for)

*1. How far (in miles) from campus is your parents' home (or the house in which you have been living? Factor loading coefficient: .76

*2. How often do you expect to go home for a weekend visit? (Not including major school holidays) (6 response options from "never" to "every weekend", recoded to 5 point scale for scoring Factor loading coefficient: .80

3. How many times have you been home for at least an overnight visit since school began? (12 week period) - (Open ended response recoded to 5 point scale for scoring) Factor loading coefficient: .80

FACTHIP: Awareness of campus activities and resources (9.7% variance accounted for)

1. Do you usually find out about social activities (parties, movies, etc.) on campus? (4 response options) Factor loading coefficient: .81

2. Do you usually find out about academic/ intellectual activities (lectures, programs, etc.) activities on campus? (4 response options) Factor loading coefficient: .68

3. Do you know at least the first names of the other people living on your floor? (including both men's and women's wings) (4 response options) Factor loading coefficient: .54

*These questions administered at August data collection.
All others administered at November data collection.

Table 3

Hall Exploratory Climate Index Scores

Hall	n	Mean Score	Std Dev.
Denton 4	42	5.74	2.39
Denton 5	40	7.92	1.98
Denton 6	43	8.15	2.14
Denton 7	39	8.74	2.09
Denton 8	45	6.95	2.59
Easton 4	38	8.24	2.04
Easton 5	38	7.38	2.10
Easton 6	36	8.75	2.06
Easton 7	41	7.99	2.48
Easton 8	33	7.06	2.15
Total	N = 10 (halls)	7.69	0.93

Table 4

Correlation Matrix of Predictor Variables

	1	2	3	4	5	6
Sex (1)	---	-.21[b]	-.08	-.08	-.23	-.17[b]
Exploration Preference (2)		---	-.14	.18[b]	.83[a]	.74[a]
Exploratory Climate (3)			---	.08	.43[a]	-.05
Hall Quality (4)				---	.19[b]	.78[a]
Preference x Climate Interaction (5)					---	.64[a]
Preference x Hall Quality Interaction (6)						---

[a] $p \leq .001$
[b] $p \leq .05$

Equation set a: sex, exploration preference, satisfaction with hall quality, preference x quality interaction.

Equation set b: sex, exploration preference, exploratory climate, preference x climate interaction.

Table 5

Summary of Regression Equation to Predict Number of Network Members on Hall

Variable	Multiple R	R^2	Simple r
Sex	.057	.003	-.057
Satisfaction with Hall Quality of Life	.292	.085	.290
Exploration Preference	.294	.087	.024

$F = 2.78$, $df = 3,88$, $p \leq .05$

Table 6

Summaries of Regression Equations to Predict Multidimensionality and Reciprocity of Hall-Based Networks

Criterion variable: Multidimensionality			
Predictor	Multiple R	R^2	Simple r
Sex	.424	.180	-.424
Exploratory Climate	.438	.192	.143
Exploration Preference	.453	.205	.184
Interaction: Climate x Preference	.454	.206	.246
$F = 5.65$, $df = 4,87$, $p \leq .01$			

Criterion variable: Reciprocity			
Predictor	Multiple R	R^2	Simple r
Sex	.171	.029	-.171
Exploration Preference	.260	.068	.227
Exploratory Climate	.283	.080	.092
Interaction: Climate x Preference	.322	.104	.243
$F = 2.52$, $df = 4,87$, $p \leq .05$			

Table 7

Correlation Matrix for Social Network and Lifestyle Variables

Variables												
1	-	.02	.26[b]	.16	.29[b]	.10	-.03	.16	.03	.01	.22[c]	.27[b]	.23[b]
2		-	-.04	-.02	-.03	-.14	-.01	.23[b]	.30[b]	.11	.18[c]	.16	.10
3			-	.16	.29[b]	.36[a]	.16	.08	.06	-.03	.02	-.19[c]	-.08
4				-	.27[b]	.26[b]	.00	.04	.07	.14	.08	.07	.13
5					-	.32[a]	.09	.26[b]	.12	.04	-.08	.03	-.08
6						-	.07	.24[b]	-.00	.01	.01	-.14	-.17[c]
7							-	.25[b]	.04	-.11	.32[a]	-.15	-.02
8								-	.14	-.05	.22[c]	.06	-.00
9									-	.44[a]	-.01	-.10	.14
10										-	-.19[c]	-.05	.22[c]
11											-	.13	.08
12												-	.26[b]
13													-

a = p $\leq$ .001
b = p $\leq$ .01
c = p $\leq$ .05

KEY: VARIABLE CODE

1. Social exploration preference
2. Network size
3. Network density
4. Network multidimensionality
5. Network reciprocity
6. Network satisfaction
7. Percent of network living on subject's hall
8. Hall quality satisfaction factor
9. Old network factor
10. Home visit factor
11. Awareness of campus activities factor
12. Club membership
13. Utilization of campus support resources

Figure 1. Mean URES profiles for Denton, Easton and National Sample of Co-ed Dorms.